

### ABSTRACT

A method of determining whether datapaths executing in a computer program should execute conditional processing block includes determining whether processor enable (PE) states of all of the datapaths are disabled, and branching around the conditional processing if the PE states of all of the datapaths are disabled. Branching is not performed, even if the PE states of all of the datapaths are disabled, if the program is determined to be deterministic. That determination is made by evaluating the state of a deterministic bit. Instructions are also provided for carrying out the determining and branching operations. The instructions may also be combined with operations that maintain the PE states during conditional processing.

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